1 2	DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT
3	Solid and Hazardous Waste Commission
4	Hazardous Materials and Waste Management Division (HMWMD)
_	C OOD 4007 0
5	6 CCR 1007-2
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7	OTATEMENT OF DAGIO AND DUDDOOF
8 9	STATEMENT OF BASIS AND PURPOSE AND SPECIFIC STATUTORY AUTHORITY FOR
10 11 12 13 14 15	Amendment of Regulations Pertaining to Solid Waste Sites and Facilities (6 CCR 1007-2 Part 1) – Section 1.2 Definitions – Revision of the definitions of "Agricultural wastes", "Composting", and "Environmental Media"; Addition of the definition of "Anaerobic digestion"; and deletion of definition of "Custom mill"
16	Statement of Basis and Purpose:
17 18 19 20 21 22	Note: The Department will be convening at least one stakeholder meeting to discuss these proposed changes. As such, work on the regulatory language may continue up to the rulemaking hearing date. It remains the Department's goal to resolve all stakeholder concerns by the hearing date.
23 24 25	Statutory Authority
26 27 28	These amendments to 6 CCR 1007-2, Part 1 are made pursuant to the authority granted to the Solid and Hazardous Waste Commission in § 30-20-109, C.R.S.
29 30 31	Discussion of Regulatory Proposal
32 33	I. Changes to the definition of "Agricultural Wastes"
34 35 36 37 38 39	In Colorado law, "agricultural wastes" are specifically exempted from those materials that are solid waste. The statute, in § 30-20-101(6)(b)(II), C.R.S., states that ""Solid Waste" does not include: Agricultural wastes." However, the term "agricultural wastes" is not defined in statute. The Division is proposing the following changes to the definition of "Agricultural Wastes" in the regulations.
40 41 42 43	The Division is proposing to delete the words "solid wastes" in the first phrase of the definition and replace it with the phrase "discarded materials." Using the term "solid waste" in the definition of a term that describes a material that is not "solid waste" creates confusion.
45 44 45 46 47 48 49	The Division is also proposing to strike the phrase "resulting from the raising of crops or animals on land zoned agricultural by local requirements." Agricultural wastes can be generated on land that is not necessarily zoned "agricultural." Wastes such as manures and crop residues can be generated on residentially, commercially, and even industrially zoned land. The Division proposes replacing this deleted language with, "that directly result from the raising of crops or livestock. Agricultural waste also includes manure, irrigation water and irrigation run-off and

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return flows." This language succinctly describes the materials we believe were intended to be included in the agricultural waste universe.

The Division further recommends that the phrase "that are returned to the soils as fertilizer, soil conditioner or compost, or are composted to return to the soils" be stricken from the definition. The first part of this phrase has been moved to the end of the first paragraph of the definition. This second part of this phrase was added to allow agricultural waste to be composted at a facility that was not the original site of generation so long as the composted agricultural waste was eventually returned to the soil. With the addition of the change explained in the following paragraph, this phrase is no longer necessary.

The Division believes clarification is needed to explain the limited circumstances in which agricultural wastes lose the exemption and become solid wastes. The Division believes there are three such situations. First, if agricultural wastes are mixed with other solid wastes, then the resulting mixture becomes a solid waste. This is consistent with how other mixtures of regulated and non-regulated materials are handled – the more stringent requirements apply. The second situation occurs when agricultural wastes are disposed of at a permitted solid waste disposal site and facility. In this case, the agricultural wastes are not being utilized for their fertilizer, soil conditioning or compost properties and must be managed by the receiving facility in the same way other solid wastes are managed. The third situation occurs when agricultural wastes are placed in or on the land in quantities that overwhelm the fertilization, soil conditioning, or composting values of the materials or in placement geometries where the value of the material to the soil or growing crops cannot be realized. The Division believes these situations are either improper disposal, "use constituting disposal," or landfarming, all of which would require permitting through the local governing authority and the Department.

Generally speaking, the Division believes that agricultural wastes should remain exempt from regulation as solid waste even if they undergo processing or treatment. So long as the material was agricultural waste going in to the process or treatment, so long as the agricultural waste is not mixed with solid waste, and so long as the processing or treatment residues are returned to the soils for fertilizer, soil conditioners, or compost then the wastes from the process remain agricultural wastes. This means, for instance, that anaerobic digestion using only agricultural wastes as inputs would generate only agricultural wastes along with the methane gas that is used on-site or sold. Food processing generally starts with agricultural products, not agricultural wastes. Therefore, food processing wastes would be solid wastes even if they are subsequently composted or applied to soils for fertilizer, soil conditioners, or compost,

The last change is a conforming change driven by other changes proposed herein. In all-hazard events or depopulation events caused by such things as blizzards, or diseases such as bird flu. burial pits are sometimes necessary to deal with the large numbers of animal carcasses. The Division believes flexibility to use burial pits needs to be preserved.

## Changes to the definition of "Composting" II.

We are recommending that the definition of "composting" be changed in two places. First, we are recommending that vermicomposting be added as an additional type of composting. Vermicomposting is a method of using worms to transform organic waste into a nutrient-rich fertilizer. Though a small niche in the composting industry, vermicomposting is a well-established and traditional composting method. Second, we are recommending that the phrase "of piles and windrows" be removed from the definition because not all composting utilizes piles and/or windrows.

## III. Addition of a definition for "Anaerobic Digestion"

As anaerobic digestion becomes an increasingly common treatment for organic waste streams, the Department is getting many inquiries about how and when the process will be regulated.

While the term "anaerobic digestion" does not currently appear in the Solid Waste regulations, anaerobic digestion of solid waste could be regulated by various combinations of Section 2 (minimum standards), Section 8 (beneficial use), Section 9 (surface impoundments), Section 14 (composting), and Section 18 (waste grease), depending on the design and operation of the facility. Therefore, the Department feels it is time to develop a definition for the term. The first part of the proposed definition comes from the American Biogas Council's definition of anaerobic digestion. The second part of the proposed definition provides context for its application.

IV. Deletion of the definition of "Custom Mill"

The definition of Custom Mill is being deleted from Section 1.2 of the Solid Waste regulations because the term is never used within the regulations and because Custom Mills are not regulated by the CDPHE, but are instead regulated by the Department of Natural Resources in their Division of Mine Reclamation and Safety.

V. Changes to the definition of "Environmental Media"

The Division recommends that two changes be made to the definition of "Environmental Media." First, we recommend that surface water and ground water be added as an additional category of environmental media. Surface water and ground water are considered environmental media in the hazardous waste program, and the Solid Waste Program has operated as if they were non-regulated materials. It is therefore time to officially add them to this definition.

The second addition to the definition of "Environmental Media" is to add clarification for the limited circumstances in which environmental media could become solid wastes. The Division believes there are two such situations:

1. If environmental media are mixed with other solid wastes, then the resulting mixture becomes a solid waste. As explained previously, this is consistent with how other mixtures of regulated and non-regulated materials are handled – the more stringent requirements apply. This is clear when soil or other earthen environmental media are visibly mixed with a solid waste such as construction and demolition debris. It would also be true, however, when environmental media are mixed with unseen contamination – for instance, asbestos fibers in soil, or dissolved contamination in surface or ground water. When environmental media, either soil or groundwater becomes contaminated, such as with a petroleum spill to soil or a leachate release to groundwater, and such media is then removed as part of a cleanup or generated as investigation derived waste as with purge water from a groundwater sampling event, the resultant material is no longer environmental media, but rather, a solid waste.

2. When environmental media are disposed of at a permitted solid waste disposal site and facility. In this case, the environmental media must be managed by the receiving facility in the same way other solid wastes are managed.

## Cost/Benefit Analysis

A cost-benefit analysis will be performed if requested by the Colorado Department of Regulatory Services.